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EXAMINER

SHIN, KYUNG H

ART UNIT PAPER NUMBER

2143

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/832,436

Applicant(s)

REYNOLDS ET AL.

Examiner

Kyung H. Shin

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is responding to application papers dated 3/21/2005.
2. Claims **1 - 39** are pending. Claims **1, 3, 18** have been amended. Claims **2, 19** have been canceled. Independent claims are **1, 11, 12, 18, 28, 30**.

Response to Arguments

3. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., *registering the command through the command proxy local to the application with a central command daemon associated with said command interface.*) to the claims which significantly affected the scope thereof.

- 3.1 Applicant argues that the prior art does not disclose the registration or placement of a command within a table. Rangachar in view of Barrett discloses the capability to register a command within a table to enable input of a command in order to execute an application. (see Barrett col. 2., lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55)
- 3.2 Applicant argues that the prior art does not disclose an Application Programming Interface (API) interface. Rangachar in view of Barrett discloses a API interface for the development of applications which enable the registration of a command

which specifies an application to execute. (see Barrett col. 2, lines 41-46; col. 3, lines 16-20; col. 4, line 64 - col. 5, line 2)

3.3 Applicant argues that the prior art does not disclose a plurality of command proxies. Rangachar discloses multiple telecommunications switches (i.e. network devices) managed by a plurality of processes (i.e. daemons or executions) wherein one process is enabled for each network device. (see Rangachar col. 7, lines 6-10)

3.4 Applicant argues that the prior art does not disclose multiple command interfaces. Rangachar in view of Barrett and further in view of Chen discloses a web interface (see Barrett col. 3, lines 49-52; col. 4, lines 16-22), a command line interface (CLI) (see Chen col. 1, lines 50-56), and a network management station (NMS) interface for input of commands. (see Rangachar col. 4, lines 7-11).

3.5 In reply to an obviousness rejection under 35 U.S.C. § 103, applicant argues that the secondary reference and primary reference combination is not allowed due to nonobviousness. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Furthermore, in response to applicant's arguments against the reference individually, one cannot show nonobviousness by attacking references individually

where rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

3.6 Applicant's arguments have thus been fully analyzed and considered but they are not persuasive. In response to Applicant's arguments, 37 CFR § 1.111(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made".

3.7 Examiner respectfully uphold the rejection of all claims, due to the fact that Rangachar in view of Barrett and further in view of Chen prior art does disclose the claims and limitations of applicant's invention.

Claim Rejections - 35 USC § 103

4. **Claims 1, 3 - 8, 10 - 15, 17, 28 - 35, 37, 38, 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rangachar et al. (US 6,301,252)** in view of **Barret et al. (US 6,782,420)**.

Regarding Claim 1 (Currently Amended), Rangachar discloses a method of managing a telecommunications network device, comprising:

- c) receiving the command at the command interface from a user interface; (see Rangachar col. 4, lines 28-30: command is sent to network manager which is central command processing software)
- d) forwarding the command to the application; (see Rangachar col. 5, lines 23-28): send to process (command proxy) for applicable network device) and
- e) completing execution of the command. (see Rangachar col. 4, lines 41-47: process command at network device)

Rangachar discloses a network management system controlling a plurality of managed network devices. (see Rangachar col. 4, lines 7-11: "*... a network manager (sometimes referred to as a network server or a network management station) communicating with a plurality of ... switches connected by communications links ...*") Rangachar does not specifically disclose the storage (register) of a command within a command interface. However, **Barrett** discloses:

- a) registering at least one command executable by an application with one of a plurality of distributed command proxies associated with a command interface (see Rangachar col. 7, lines 6-10; col. 7, lines 14-18: plurality of processes (i.e. daemons or executions) for distributed command interfaces), said command proxy being local to the application; (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col. 1, lines 45-47: distributed environment, store (register) commands within the command interface)

- b) registering the command through the command proxy local to the application with a central command daemon associated with said command interface; (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col. 1, lines 45-47: distributed environment, store (register) commands within the command interface)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable the registration of a command as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20: "... *(API) and protocol that provides for efficient communication between a distributed client application and an element management server independent of the communication protocol ...* ")

Regarding Claim 3 (Currently Amended), Rangachar discloses the method of claim 1, wherein receiving the command at the command interface from a user interface and forwarding the command to the application comprises:

- a) receiving the command at one of the plurality of command proxies that is local to the user interface; (see Rangachar col. 4, lines 28-30; col. 5, lines 23-28: commands are diverted to central network manager (central command daemon), then command is sent to specific process (command proxy) for the particular network device)

- b) determining if the application that registered the received command is local to the command proxy that is local to the user interface; (see Rangachar col. 5, lines 23-28; col. 4, lines 41-47: command is sent to specific process (command proxy) for the particular network device from network manager (central command daemon))
- c) if yes, then forwarding the received command to the application that registered the received command; and if no, then forwarding the received command to the central command daemon. (see Rangachar col. 4, lines 28-30: forward commands to network manager for command implementation at local process, col. 5, lines 23-28: forward to network device for processing)

Regarding Claim 4 (Original), Rangachar discloses the method of claim 3, further comprising:

- a) forwarding the received command to the one of the plurality of command proxies that registered the received command; (see Rangachar col. 5, lines 23-28: forward to process (command proxy)) and
- b) forwarding the received command to the application that registered the received command. (see Rangachar col. 4, lines 41-47: forward to network device for processing)

Regarding Claim 5 (Original), Rangachar does not specifically disclose the storage (register) of a command within a command interface. However, **Barrett** discloses the method of claim 1, wherein the command interface is a central system and wherein

registering at least one command executable by an application with a command interface comprises: registering the command with a central command daemon. (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col. 1, lines 45-47: distributed environment, store (register) commands within the command interface)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable the registration of a command as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 6 (Original), Rangachar does not specifically disclose an API interface for application development. However, **Barrett** discloses the method of claim 1, wherein completing execution of the command comprises:

- a) receiving the command through a command application programming interface (API) linked into the application; and calling a call back routine within the application corresponding to the received command. (see Barrett col. 2, lines 41-46; col. 3, lines 16-20; col. 4, line 64 - col. 5, line 2: API interface exists for server network management system for application development)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable usage of an Application Programming Interface (API) in application development as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to

enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 7 (Original), Rangachar does not disclose a display interface for responses to command. However, **Barrett** discloses the method of claim 6, wherein completing execution of the command further comprises: calling a display routine linked into the application to send any display data directly to the user interface. (see Barrett col. 2, lines 38-41; col. 5, lines 56-60: display commands and responses at command console)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable a user interface for command processing as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claims 8 (Original), 15 (Original), 35 (Original), Rangachar does not specifically disclose a web interface for the network management system. However, Barrett discloses the method of claims 1, 13, 32, wherein the user interface comprises: a web interface. (see Barrett col. 3, lines 49-52; col. 4, lines 16-22: web type command interface for network management system)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable a web interface as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to

enable efficient communications between a management server and distributed client.
(see Barrett col. 3, lines 16-20)

Regarding Claims 10 (Original), 17 (Original), 37 (Original), Rangachar discloses the method of claims 1, 13, 32, wherein the user interface comprises: a network/element management system interface. (see Rangachar col. 4, lines 7-11: network management system with management console or station)

Regarding Claim 11 (Original), Rangachar discloses a method of managing a telecommunications network device, comprising:

- c) receiving the command at a user interface; (see Rangachar col. 4, lines 28-30:
forward command to network manager (central command processing))
- d) forwarding the command to a second command proxy, wherein the second command proxy is local to the user interface; (see Rangachar col. 5, lines 23-28:
forward command to applicable process (command proxy))
- e) forwarding the command through the second command proxy to the central command daemon; (see Rangachar col. 4, lines 28-30: forward command to network manager (central command processing))
- f) forwarding the command through the central command daemon to the first command proxy; (see Rangachar col. 5, lines 23-28: forward command to applicable process (command proxy))

- g) forwarding the command through the first command proxy to the application; (see Rangachar col. 4, lines 28-30: forward command to network manager (central command processing)) and
- h) completing execution of the command. (see Rangachar col. 4, lines 41-47: process command at network device)

Rangachar does not specifically disclose the storage (register) of a command within a command interface. However, Barrett discloses a method of managing a telecommunications network device, comprising:

- a) registering at least one command executable by an application with a first command proxy, wherein the first command proxy is local to the application; (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col. 1, lines 45-47: distributed environment, store (register) commands within the command interface).
- b) registering the command through the first command proxy with a central command daemon; (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col. 1, lines 45-47: distributed environment, store (register) commands within the command interface)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable the registration of a command as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 12 (Original), Rangachar discloses a method of managing a telecommunications network including a first network device and a second network device, comprising:

- a) executing a community command daemon on one of the first or second network devices; (see Rangachar col. 4, lines 28-30: multiple network devices are managed by network manager (central command daemon))
- b) executing a first application on the first network device; executing a second application on the second network device; (see Rangachar col. 5, lines 23-28: applicable process (command proxy) is executed)

Rangachar does not specifically disclose the storage (register) of a command within a command interface. However, **Barrett** discloses a method of managing a telecommunications network including a first network device and a second network device, comprising:

- c) registering a first command executable by the first application with a first command interface on the first network device; registering a second command executable by the second application with a second command interface on the second network device; (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col. 1, lines 45-47: distributed environment, store (register) commands within the command interface) and
- d) registering the first and second commands with the community command daemon. (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col.

1, lines 45-47: distributed environment, store (register) commands within the command interface)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable registration of a command as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claims 13 (Original), 14 (Original), Rangachar discloses the method of claim 12, further comprising:

- a) receiving the first/second command at the community command daemon from a user interface; (see Rangachar col. 6, lines 24-26: multiple command interface systems ;col. 4, lines 28-30: network manager (community command daemon))
- b) forwarding the first command through the community command daemon to the first/second command interface; (see Rangachar col. 5, lines 14-19)
- c) forwarding the first/second command through the first command interface to the first/second application; (see Rangachar col. 5, lines 23-28) and
- d) completing execution of the first/second command. (see Rangachar col. 4, lines 41-47: process command at network device)

Regarding Claim 28 (Original), Rangachar discloses a telecommunications network device, comprising:

- a) a common command interface; (see Rangachar col. 4, lines 28-30: network manager (command interface)) and

Rangachar does not specifically disclose an API interface for application development. However, Barrett discloses a telecommunications network device, comprising:

- b) an application capable of executing a command, wherein the application includes a command application programming interface (API) for registering the command with the common command interface. Rangachar does not disclose an API for application development. However, Barrett discloses an API interface. (see Barrett col. 2, lines 41-46; col. 3, lines 16-20; col. 4, line 64 - col. 5, line 2: API interface for application development)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable usage of an Application Programming Interface (API) in application development as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 29 (Original), Rangachar discloses the telecommunications network device of claim 28, wherein the command API includes a command handler and wherein the common command interface is capable of receiving the command from a user interface and forwarding the received command to the command handler. (see

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Rangachar col. 4, lines 28-30: input commands are diverted to network manager (command interface) for network management system) Rangachar does not disclose an API interface for application development. However, Barrett discloses an API interface. (see Barrett col. 2, lines 41-46; col. 3, lines 16-20; col. 4, line 64 - col. 5, line 2: API interface for application development)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable usage of an Application Programming Interface (API) in application development as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 30 (Original), Rangachar discloses a telecommunications network, comprising:

- a) a first network device; (see Rangachar col. 4, lines 7-11)
- b) a second network device connected to the first network device; (see Rangachar col. 4, lines 7-11: a plurality of network devices connect by communication links)
- c) a community command daemon executing on the first or second network device; (see Rangachar col. 4, lines 28-30: network manager (community command daemon) for executing network management command on a network device) and

Rangachar does not specifically disclose the storage (register) of a command within a command interface. However, **Barrett** discloses a telecommunications network, comprising:

- d) a first common command interface executing on the first network device and capable of registering a first command with the community command daemon; and a second common command interface executing on the second network device and capable of registering a second command with the community command daemon. (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55: distributed environment, store (register) commands within the command interface)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable registration of a command as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 31 (Original), Rangachar does not specifically disclose the storage (register) of a command within a command interface. However, Barrett discloses the telecommunications network of claim 30, further comprising:

- a) a first application executing on the first network device and capable of registering the first command with the first common command interface; and a second application executing on the second network device and capable of registering the second command with the second common command interface. (see Barrett

col. 2, lines 21-27: distributed environment, store (register) commands within the command interface, col. 1, lines 45-47)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable registration of a command as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 32 (Original), Rangachar discloses the telecommunications network of claim 30, further comprising:

- a) a first user interface (see Rangachar col. 6, lines 24-46: multiple network managers for a first and second command environments) executing on the first network device and capable of sending the first command to the first common command interface, wherein the first common command interface is capable of forwarding the received first command to the first application; (see Rangachar col. 4, lines 28-30; col. 5, lines 23-28) and
- b) a second user interface executing on the second network device and capable of sending the second command to the second common command interface, wherein the second common command interface is capable of forwarding the received second command to the second application. (see Rangachar col. 4, lines 28-30; col. 5, lines 23-28)

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Regarding Claim 33 (Original), Rangachar discloses the telecommunications network of claim 32, wherein the first and second user interface comprise the same user interface. (see Rangachar col. 6, lines 24-46: multiple network managers for a first and second command environments; col. 4, lines 7-11: both user interfaces are network management consoles)

Regarding Claim 34 (Original), Rangachar discloses the telecommunications network of claim 32, wherein the first and second user interface comprise different user interfaces. (see Rangachar col. 6, lines 24-46: multiple network managers for a first and second command environments; col. 1, lines 50-56: first interface is a network management interface and second interface is a command line interface)

Regarding Claims 38 (Original), Rangachar discloses the telecommunications network device of claim 32, wherein the common command interface comprises a distributed system and a central system including:

- a) a central command daemon; (see Rangachar col. 4, lines 18-22; col. 7, lines 6-10: network manager (central command daemon)) and
- b) a plurality of distributed command proxies. (see Rangachar col. 4, lines 7-11; col. 5, lines 23-28: processes (command proxies))

Regarding Claim 39 (Original), Rangachar discloses the telecommunications network of claim 30, wherein the first and second common command interfaces each comprise a central system including: a central command daemon. (see Rangachar col. 6, lines 24-

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26; col. 4, lines 28-30: separate common command interfaces, network manager
(central command daemon))

5. **Claims 9, 16, 18, 20 - 27, 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rangachar-Barrett as applied to claims 1, 12, 18, 30 above, and further in view of Chen et al. (US 6,625,590).**

Regarding Claims 9 (Original), 16 (Original), 26 (Original), 36 (Original), Rangachar does not specifically disclose a command line interface. However, **Chen** discloses the method of claims 1, 13, 18, 32, wherein the user interface comprises: a command language interface (CLI). (see Chen col. 1, lines 50-56: command line interface for command input)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to utilize a command line interface for usage by the network management system as taught by Chen. One of ordinary skill in the art would be motivated to enhance Rangachar in order to enable a flexible and robust user interface for network management control.

Regarding Claim 18 (Currently Amended), Rangachar discloses a telecommunications network device, comprising:

- a) an application capable of executing a command; (see Rangachar col. 5, lines 23-28: command processes (application) to execute a command)

Rangachar does not specifically disclose a common command interface. However,

Chen discloses:

- b) a common command interface comprising a distributed system having a central command daemon and a plurality of distributed command proxies. (see Rangachar col. 4, lines 18-27; col. 7, lines 6-10) wherein the application is capable of registering the command with the common command interface and the common command interface is capable of receiving the command from a user interface and forwarding the received command to the application. (see Chen col. 7, lines 55-59: command line interface)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable the capability of a common command interface as taught by Chen. One of ordinary skill in the art would be motivated to enhance with Chen in order to enable a flexible and robust user interface for network management control.

Regarding Claim 20 (Original), Rangachar discloses the telecommunications network device of claim 18, wherein the common command interface comprises a distributed system and a central system including:

- a) a central command daemon; (see Rangachar col. 4, lines 18-22; col. 7, lines 6-10: network manager (central command daemon)) and
- b) a plurality of distributed command proxies. (see Rangachar col. 4, lines 7-11; col. 5, lines 23-28: processes (command proxies))

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Regarding Claim 21 (Original), Rangachar does not specifically disclose an API interface for application development. However, Barrett discloses the telecommunications network device of claim 18, wherein the application comprises: a command application programming interface (API) for registering the command with the common command interface and for responding to the command forwarded by the common command interface. (see Barrett col. 2, lines 41-46; col. 3, lines 16-20; col. 4, line 64 - col. 5, line 2: API interface for application development)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable usage of an Application Programming Interface (API) in application development as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 22 (Original), Rangachar discloses the telecommunications network device of claim 21, wherein the command API comprises:

- b) a command handler for responding to the command forwarded by the common command interface. (see col. 4, lines 18-25: network manager (command handler) processing commands)

Rangachar does not disclose the registration of a command. However, Barrett discloses :

- a) a registration routine for registering the command with the common command interface; (see Barrett col. 2, lines 21-27; col. 6, lines 6-11; col. 6, lines 53-55; col. 1, lines 45-47: distributed environment, store (register) commands within the command interface)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable registration of a command as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 23 (Original), Rangachar does not specifically disclose an API interface for application development. However, Barrett discloses the telecommunications network device of claim 22, wherein the application further comprises: a call back routine, wherein the command handler calls the call back routine when the command handler receives the command forwarded by the common command interface. (see Barrett col. 2, lines 41-46; col. 3, lines 16-20; col. 4, line 64 - col. 5, line 2: API interface for application development)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable usage of an Application Programming Interface (API) in application development as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 24 (Original), Rangachar does not disclose a display interface for responses to command. However, **Barrett** discloses the method of claim 21, wherein completing execution of the command further comprises: calling a display routine linked into the application to send any display data directly to the user interface. (see Barrett col. 2, lines 38-41; col. 5, lines 56-60: display commands and responses at command console)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable a user interface for command processing as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claim 25 (Original), Rangachar does not specifically disclose a web interface for the network management system. However, Barrett discloses the method of claim 18, wherein the user interface comprises: a web interface. (see col. 3, lines 49-52; col. 4, lines 16-22: web type command interface for network management system)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rangachar to enable a web interface as taught by Barrett. One of ordinary skill in the art would be motivated to employ Barrett in order to enable efficient communications between a management server and distributed client. (see Barrett col. 3, lines 16-20)

Regarding Claims 27 (Original), Rangachar discloses the method of claim 18, wherein the user interface comprises: a network/element management system interface. (see Rangachar col. 4, lines 7-11: network management system with management console or station)

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9 am - 7 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

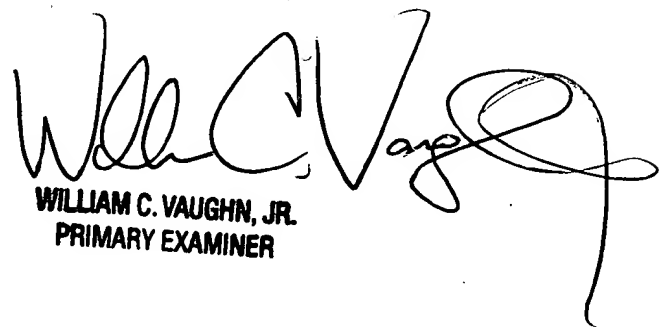
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KHS

Kyung H Shin
Patent Examiner
Art Unit 2143

KHS

June 8, 2005


WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER